

METHOD AND RELATED APPARATUS FOR LOCKING PHASE WITH ESTIMATED RATE MODIFIED BY RATE DITHERING

Abstract

A method and related apparatus for providing a clock synchronized with an input signal. The method includes generating an estimated rate according to transitions in the input signal, processing a dithering step for updating the estimated rate by multiplying it with a predetermined ratio, and adjusting the frequency of the clock according to the updated estimated rate. The predetermined ratios used in repeated dithering steps are modified according to a predetermined rule such that the predetermined ratio is different when the dithering steps are repeated.